WESTERN WATERSHEDS PROJECT SUMMARY OF PROTEST POINTS AND RESPONSES

January 11, 2016 Proposed Grazing Decision Environmental Assessment (DOI-BLM-CO-S010-2012-0034)

PROTEST POINTS

Many of the protest points submitted by Western Watersheds Project to the proposed grazing decision reference compliance with specific resource management direction contained within the 2015 Resource Management Plan and Record of Decision for the Tres Rios Field Office, BLM. Therefore, it is important to understand the context of how the framework and interrelated components contained within the RMP guide resource management direction prior to addressing the specific protest points.

The approved 2015 Resource Management Plan (RMP) and Record of Decision (ROD) for the Tres Rios Field Office, BLM identifies broad management direction for managing resources within the field office. This management direction is divided into three interrelated components that are described in detail in Section 1.2 on pages II-3 and II-4 of the RMP and state: 1) *desired conditions*, which, when taken as a whole, make up the vision for management of the planning area; 2) *objectives, suitability*, and *allowable uses*, which comprise the plan strategy that will be used to achieve the vision; and 3) *standards and guidelines*, which are the criteria and controls used to execute the strategy. This management direction and guidance should be followed in future implementation of projects and activities, and is also referred to as the *plan components*, or RMP *components*.

Because the RMP was originally developed by two different agencies, its format and some of its terminology vary from the BLM's conventional resource management plans. Therefore the following table shows the terminology used in this document as compared to that which the BLM typically uses to identify various types of plan decisions.

RMP Component Terminology	Conventional BLM Plan Decision Terminology
Desired Conditions	Goals
Objectives	Objectives
Suitability and Allowable Uses	Allowable Uses
Standards	Management Actions
Guidelines	Guidelines

In addition, the following are the definitions for *Desired Conditions*, *Objectives*, *Suitability and Allowable Uses*, *Standards*, and *Guidelines*. These definitions can be found in Section 1.2 of the RMP on pages II-4 and II-5:

Desired Conditions: Desired conditions are broad-scale direction that guides future land management actions and subsequent site-specific implementation decisions. Desired conditions in this RMP are referred to as "goals" in conventional BLM resource management plans.

Objectives: Objectives identify specific desired outcomes for resources. Objectives are usually quantifiable and measureable and may have established timeframes for achievement (as appropriate). As with desired conditions, they are aspirations, not commitments or final project decisions. Implementation and achievement would rely upon sufficient funding and staffing levels.

Suitability and Allowable Uses: Allowable uses refer to those allocations that identify surface lands and/or subsurface mineral interests where uses are allowed, restricted, or prohibited to meet desired conditions or objectives.

Standards: Standards are actions anticipated to achieve desired outcomes, including actions to maintain, restore, or improve land health. Actions include proactive measures, as well as measures or criteria that will be applied to guide day-to-day activities occurring on public land. Standards in this RMP are referred to as "management actions" in conventional BLM resource management plans.

Guidelines: A guideline refers to a practice, method, or technique determined to be appropriate to meet or move towards a desired condition. Guidelines may be adapted or modified when monitoring or other information indicates the guideline is not effective.

Western Watersheds Project Comments:

- 1. The RMP contains a wide range of requirements which are neither mentioned or fulfilled within the EA and proposed decision.
 - 2.1.7 Salinity and sediment contributions of the Dolores River tributaries (including Disappointment, Big Gypsum Valley, Little Gypsum, and Dry Creeks) are reduced through an integrated activity approach that achieves reduced erosion and improves land health.
 - 2.1.8 The unique soils of the gypsum lands in the Dolores area (including portions of Big Gypsum Valley, Little Gypsum Valley, and the Spring Creek area) are intact and have the soil productivity necessary in order to protect the rare biota associated with them.

Response: 2.1.7 and 2.1.8 referred to above are desired conditions or goals outlining broad scale direction for reducing salinity and sediment contributions of specific

tributaries to the Dolores River and protecting areas of unique gypsum soils within Gypsum Valleys and other specific areas within the Tres Rios Field Office.

Portions of both the Big Gypsum Valley and Little Gypsum Valley occur within the Gypsum Valleys Allotment. Section 3.3.1 of the affected environment starting on page 41 of the EA addresses upland soil conditions within the allotment. The analysis contained within the EA determined that Colorado Public Land Health Standard 1 for Upland Soils was not being met for portions of the Gypsum Valleys Allotment, and that current livestock grazing management was one of the causal factors.

Standard 1 for Upland Soils reads as follows: "Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff".

The analysis within the EA determined that soil erosion was higher than expected for site potential based on existing water flow patterns, active pedestals, high amounts of bare ground, evidence of active gullies and decreased litter amounts. Please refer to Evaluation of Land Health Assessment contained in Appendix H of the EA for more detailed information regarding this standard.

As a result of this determination, several grazing alternatives were developed and included in the analysis which proposed changes to existing grazing management on the allotment to improve existing resource conditions including upland soils. After considering public input received to the EA and all alternatives, a proposed grazing decision was issued on January 11, 2016 proposing changes to current grazing outlined in Alternative C (Adaptive Management). This alternative and subsequent proposed decision proposes to 1) reduced current grazing levels from 1,807 AUMs to 1,761 AUMs; 2) implements an intensive 3-year deferred rotational grazing system for deferring on a regular basis livestock grazing during the critical spring growing season for desired vegetation; 3) establishes acceptable utilization levels on forage plant species by pastures of either 30% or 40% depending on resource condition, 4) identifies potential drought management actions for grazing to mitigate impacts to soils and vegetation communities, and 5) identifies further adaptive management actions to be implemented if monitoring does not show improvement in resource conditions.

The intent of the proposed changes in livestock grazing management is to improve existing watershed conditions on the allotment for the purpose of making significant progress towards meeting Standard 1 for Upland Soils. Specifically, the analysis of the proposed changes identified in the environmental effects section of the EA for upland

soils and watershed conditions can be found respectively in Sections 4.2.3.1 and 4.2.3.2 beginning on page 74 of the EA. In summary, the analysis concluded that the proposed changes would make significant progress towards meeting Standard 1 Upland Soils by improving the soil surface resistance to erosion, reducing bare ground, reducing soil surface loss, and improving infiltration rates.

Therefore, the proposed changes to current grazing management would also be in compliance with the broad scale desired conditions or goals outlined in both 2.1.7 and 2.1.8 by 1) reducing the amount of saline soil sediment contributions to the Dolores River from both Big Gypsum Valley and Little Gypsum Valley by increasing ground cover; and 2) by increasing the soil productivity and reducing potential soil loss of the unique gypsum soils by increasing ground cover within the allotment.

- 2. The EA fails to explain how the impacts of livestock grazing, on vegetation, on soils and on Biological Soil Crust (BSC) are in line with this requirement.
 - 2.1.13 Willow riparian areas and wetland ecosystem communities throughout the low and mid elevations of the Dolores geographic area display moderate to high canopy cover (greater than 20%) of willows, including young-, middle-, and old age classes.

Response: 2.1.13 referred to above is a desired conditions or goal outlining broad scale direction for maintaining willow canopy cover of 20% or greater for all age classes for riparian and wetland ecosystems within the Tres Rios Field Office.

As part of the land health assessment effort, riparian proper functioning condition assessments (PFC) were completed by and interdisciplinary team of resource specialists on portions of the Dolores River, Coyote Wash and numerous contact seeps and springs within the allotment. Proper Functioning Condition is a qualitative survey used to assess the hydrology, vegetation and erosional/depositional processes of riparian areas. Based on this assessment it was determined that riparian areas within the allotment were making significant progress towards meeting Standard 2 for riparian and wetland areas. Please refer to the Affected Environment Section 3.3.3 for a discussion of the Wetlands/Riparian Zones on beginning on page 49 of the EA. The affected environment section of the EA indicates that the Dolores River is dominated by Cottonwoods, box elder, privet, and willow species, and that all other major drainages are primarily intermittent and/or ephemeral drainages that flow only in response to runoff events. Therefore, these ephemeral systems may or may not support discontinuous patches of riparian vegetation due to limited amounts of water in these systems.

In addition, many of the seeps and/or springs found in the allotment were determined to be either small contact springs located where there is an impermeable geologic layer found beneath a permeable geologic layer or seep-infiltration springs occurring in channels where a stream has down cut or where there is up-thrusting geology. Because of the relative small size and locations of contact springs the potential for riparian vegetation is limited or lacking, while seep-infiltration springs are usually marked by individual Cottonwoods at the source and small patches of riparian vegetation to include willows continuing a short way down from the source.

Therefore, based on the analysis of riparian conditions contained in the environmental assessment in which the lack of willow canopy cover was not identified concern it can be inferred that the allotment is in compliance with the broad scale desired condition or goal contained in 2.1.13 for maintaining willow canopy cover at 20% or greater within the allotment.

- 3. No such objective or actions to meet the objective has been provided by the EA or DN.
 - 2.3.1 The composition, structure, and function of terrestrial ecosystems are influence by natural ecological processes, including disturbance events such as fire, infestations by insects or disease, winds, and flooding.

Response: The Adaptive Management Alternative (Alterntive C) described in Section 2.4 on page 17 of the EA and which was incorporated in the proposed grazing decision identify specific grazing management actions that will improve conditions of existing plant communities and wildlife habitats within the allotment.

The actions proposed will not impede the influence by natural ecological processes as described in the broad scale desired condition or goal contained in 2.3.1 described above.

- 4. The EA is silent on how high densities of non-native, invasive species (cattle) that have no native correlate and which have been described in the EA as having caused major degradation of composition, structure and function could rationally be considered as a natural ecological process.
 - 2.3.3 Key ecosystems that are not functioning properly are realigned/restored/renovated to survive the near-future dynamics of changing climate.
 - 2.3.15 Non-forested terrestrial ecosystems have community structure and species composition that offer resistance and resilience to changes in climate, including extreme weather events, or epidemic insect and disease outbreaks.
 - 2.3.29 Sagebrush Shrublands Sagebrush shrublands display variable stand structures. Some are open with widely spaced shrubs; others are dense. Some large patches are

present. Sagebrush and other native shrubs are abundant and well distributed. Native perennial grasses (including Indian ricegrass [Oryzopsis hymenoides], galleta [Pleuraphis sp.], western wheatgrass [Pascopyrum smithii], and needle and thread [Hesperostipa comate]) are abundant and well distributed. Encroachment of pinyon and juniper trees is absent or rare. Invasive plant species are absent or rare. Biological soil crusts are common and well distributed on many sites. High-intensity, replacement fires occur in most sagebrush shrublands.

2.3.30 Semi-Desert Shrublands – Semi desert shrublands are dominated by native shrubs that could include shadscale (Atriplex confertifolia), winterfat (Krascheninikovia), fourwing saltbush (Atriplex canescens), plains pricklypear (Opuntia polyacantha), rubber rabbitbrush (Ericameria nauseosa), spiny hopsage (Grayia spinosa), greasewood (Sarcobatus sp.), and/or basin big sagebrush (Artemisia tridentate ssp. tridentate). Stand structures display open or moderately dense shrubs with native perennial grasses and forbs in the openings between them. Native grasses (including Indian ricegrass, galleta, western wheatgrass, and needle and thread) are abundant and well distributed. Invasive plant species and/or undesirable native plant species that are currently abundant on most sites are absent or rare. Biological soil crusts and litter are common on most sites.

2.3.31 Semi-Desert Grasslands – Semi desert grasslands are dominated by native perennial bunchgrasses (including Indian ricegrass, galleta, and needle and thread). Invasive plant species and/or undesirable native plant species that are currently abundant on most sites are absent or rare. Biological soil crusts and litter are common on most sites.

Response: The Tres Rios 2015 Approved RMP and ROD on page II-50 identified 388,202 acres and 20,537 animal unit months (AUMs) as available for cattle grazing to include the Gypsum Valleys Allotment.

The EA analyzed the potential impacts of several different livestock grazing scenarios to include no grazing on existing ecological conditions to include soils, vegetation communities, riparian and/or wetland systems, noxious weed species, wildlife habitats both aquatic and terrestrial, special status plant and animal species.

Furthermore, the Adaptive Management Alternative (Alternative C) described in Section 2.4 on page 17 of the EA and which was incorporated in the proposed grazing decision identify specific required adaptive management grazing actions. This adaptive management approach implements an 1) an intensive deferred rotational grazing system using existing pastures to provide for regular rest from grazing during the critical spring growing season; 2) reduces permitted AUMs; 3) establishes acceptable utilization levels

of either 30% - 40% depending on pasture; 4) identifies a host of required grazing management actions to be included as terms and conditions on the grazing permit; 5) potential drought management actions; 6) identifies specific short-term (within 5 years) and long-term (10 years) quantifiable objects; 7) identifies monitoring; and 8) identifies specific thresholds and triggers for making further adjustments to grazing based on monitoring the specific objectives.

The analysis within the EA determined that the above grazing management actions would lead to improvement in resource conditions and result in making significant progress towards attainment of the 5 Public Land Health Standards developed for Colorado.

In addition, these proposed management actions would be consistent with the broad scale desired conditions or goals contained in 2.3.3, 2.3.15, 2.3.29, 2.3.30 and 2.3.31.

- 5. Nearly all sites on the allotment are far from meeting these objectives, yet the only action being taken is a reduction in utilization, but not permitted AUM's.
 - 2.3.34 Soil productivity is maintained at site potential or is trending towards site potential
 - 2.3.36 Ground cover (vegetation and litter) is adequate to protect soils and prevent erosion.
 - 2.3.38 Biological soil crusts are maintained or increased in pinyon-juniper woodlands, sagebrush shrublands, semi-desert shrublands, and semi-desert grasslands.

Response: The Adaptive Management Action (Alternative C) analyzed in the EA and contained in the proposed grazing decision include more livestock grazing management actions that just a reduction in acceptable utilization levels. Please refer to Section 2.4 starting on page 17 for a description of the proposed livestock grazing management actions and Section 4.0 of the EA for the environmental effects of the Adaptive Management Alternative and associated management actions. In addition, please refer to our responses to your comments of the analysis contained in Appendix L of the EA. Specifically BLM's response to Comment 1 on page 1 and Comment 4 on page 5.

In summary the proposed livestock grazing management actions contained in the proposed decision does the following; 1) reduces permitted AUMs from the current level of 1,807 AUMs to 1,761 AUMs; 2) reduces allowable utilization levels from 50% as identified in grazing guideline 2.8.24 on page II-52 of the RMP to either 30% or 40% depending on the pasture and are linked to adaptive management actions for further

reducing existing livestock grazing levels if utilization levels have been determined to be exceeded; 3) implements an intensive 3-year deferred rotational grazing system that defers livestock grazing on the allotment during the critical spring growing season on a consistent basis; 4) includes additional required grazing management actions such as requirements for not using a pasture if adequate livestock waters are lacking; placement of salt blocks, supplemental feed and/or water troughs for improving livestock distribution across the allotment; developing appropriate mitigation measures if it is determined that grazing is impacting cultural resources; and requirements for minimizing the potential spread of noxious weeds. A detailed list of these required livestock grazing management actions can be found in Section 2.8 of the EA beginning on page 24; and in the proposed grazing decision.

Therefore, it was determined through the analysis that the combination of these grazing management actions would facilitate for improvement in the existing resource conditions within the allotment and is consistent with the broad scale desired condition or goals identified in 2.3.34, 2.3.36 and 2.3.38 of the RMP. In addition, it was determined that implementation of these management actions would result in making significant progress towards meeting the public land health standards developed for Colorado in accordance with 43 CFR 4180 (Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration).

- 6. The EA is nearly completely silent on this foundation of the ecosystem, nor are actions implemented to achieve this objective.
 - 2.3.58 Projects or activities that occur in shale and gypsum soils that are occupied by special status plant species must be designed to maintain the soil characteristics necessary to support and sustain those species.

Response: Please refer to BLM's response to protest point number 1 provided above. The analysis contained within the EA and subsequent proposed decision is consistent with the broad scale desired conditions or goals contained in 2.3.58 pertaining to shale and gypsum soils.

- 7. Again, this issue is totally ignored by the BLM when it callously rejects any actions to protect these resources stating that livestock is allowed in the ACEC. As discussed later, whether livestock grazing is allowed or not is not the issue. The issue is the protection of the resources for which the ACEC was established to protect.
 - 2.3.59 Agency actions should not adversely affect the long-term soil productivity or carbon storage of terrestrial ecosystems.

2.3.68 Management activities in areas with biological soil crusts should be designed to minimize adverse impacts to the soil crusts.

Response: The environmental effects discussed in Section 4.2.3.1 for uplands soils concludes that with implementation of the Adaptive Management Alternative (Alternative C), upland soils conditions would improve within the allotment to include the ACEC. Specifically, soil surface resistance to erosion is expected to improve, a reduction in soil surface loss, improved infiltration, reduction in amount of bare ground and an increase in biological soil crusts.

Therefore, the Adaptive Management Alternative (Alternative C) contained in the proposed decision is consistent with the guidelines for maintaining soil productivity and biological soil crusts contained in 2.3.59 and 2.3.68 of the RMP.

- 8. No actions to implement this requirement have been put into the proposed action or DN.
 - 2.4.12 Populations are conserved by maintaining or improving habitat availability and quality through the incorporation of conservation strategies and species habitat needs during project development and implementation.
 - 2.14.13 Riparian and aquatic habitat, including springs and fens, support well distributed populations of invertebrate and vertebrate riparian and aquatic dependent wildlife special status species.

Response: The EA analyzed the potential impacts of several different livestock grazing scenarios to include no grazing on existing ecological conditions to include soils, vegetation communities, riparian and/or wetland systems, noxious weed species, wildlife habitats both aquatic and terrestrial, special status plant and animal species.

Furthermore, the Adaptive Management Alternative (Alternative C) described in Section 2.4 on page 17 of the EA and which was incorporated in the proposed grazing decision identify specific required adaptive management grazing actions. This adaptive management approach implements an 1) an intensive deferred rotational grazing system using existing pastures to provide for regular rest from grazing during the critical spring growing season; 2) reduces permitted AUMs; 3) establishes acceptable utilization levels of either 30% - 40% depending on pasture; 4) identifies a host of required grazing management actions to be included as terms and conditions on the grazing permit; 5) potential drought management actions; 6) identifies specific short-term (within 5 years) and long-term (10 years) quantifiable objects; 7) identifies monitoring; and 8) identifies

specific thresholds and triggers for making further adjustments to grazing based on monitoring the specific objectives.

The analysis within the EA contained in Section 4.2.3.6 pertaining to terrestrial wildlife determined that the above grazing management actions would lead to an overall improvement in wildlife habitat conditions within the allotment. Therefore, the management actions contained in the proposed decision are consistent with the broad scale desired condition or goal contained in 2.4.12.

Furthermore, the analysis contained in Section 4.2.3.6 of the EA for aquatic wildlife determined that most of the riparian areas within the allotment rated as either "Proper Functioning Condition" or "Functional at Risk with an upward trend". As a result of these assessments it was determined in the analysis that the Public Land Health Standard for riparian/wetlands areas within the allotment was currently being met. Therefore, based on this analysis it can be inferred that the broad scale desired condition or goal for riparian and aquatic habitat contained in 2.14.13 is being met.

- 9. No information or actions have been provided to implement this requirement.
 - 2.5.12 Long term impacts to soils (e.g., soil erosion, soil compaction, soil displacement, puddling, and/or severely burned soils) from management actions are rare on all riparian area and wetland ecosystems.
 - 2.5.18 Long term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.

Response: As part of the land health assessment effort, riparian proper functioning condition assessments (PFC) were completed by and interdisciplinary team of resource specialists on portions of the Dolores River, Coyote Wash and numerous contact seeps and springs within the allotment. Proper Functioning Condition is a qualitative survey used to assess the hydrology, vegetation and erosional/depositional processes of riparian areas. Based on this assessment it was determined that riparian areas within the allotment were making significant progress towards meeting Standard 2 for riparian and wetland areas. Please refer to the Affected Environment Section 3.3.3 for a discussion of the Wetlands/Riparian Zones beginning on page 49 of the EA. The affected environment section of the EA indicates that the Dolores River is dominated by Cottonwoods, box elder, privet, and willow species, and that all other major drainages are primarily intermittent and/or ephemeral drainages that flow only in response to runoff events.

Therefore, these ephemeral systems may or may not support discontinuous patches of riparian vegetation due to limited amounts of water in these systems.

In addition, many of the seeps and/or springs found in the allotment were determined to be either small contact springs located where there is an impermeable geologic layer found beneath a permeable geologic layer or seep-infiltration springs occurring in channels where a stream has down cut or where there is up-thrusting geology. Because of the relative small size and locations of contact springs the potential for riparian vegetation is limited or lacking, while seep-infiltration springs are usually marked by individual Cottonwoods at the source and small patches of riparian vegetation to include willows continuing a short way down from the source.

Therefore, based on the analysis of riparian conditions contained in the environmental assessment it can be inferred that the allotment is consistent with the broad scale desired condition or goal contained in 2.5.12 and the standards or management actions contained in 2.5.18 and 2.5.20 pertaining to riparian area and wetland ecosystems.

- 10. No information or actions have been provided to implement these requirements.
 - 2.5.24 Livestock browsing should not remove more than 25% of the annual leader growth of hydrophytic shrubs and trees.

Response: Based on this assessment it was determined that riparian areas within the allotment were making significant progress towards meeting Standard 2 for riparian and wetland areas and existing browse utilization levels on hydrophytic shrubs and tree species was not identified as an issue. Please refer to the Affected Environment Section 3.3.3 for a discussion of the Wetlands/Riparian Zones beginning on page 49 of the EA.

Therefore, the existing grazing management is consistent with meeting the guideline contained in 2.5.24 of the RMP.

- 11. No term and condition implementing this requirement has been provided.
 - 2.6.3 The quantity and quality of aquatic habitats are maintained or enhanced to provide for the long-term sustainability of biological diversity of all native and/or desired non-native vertebrate species.
 - 2.7.1 State water quality standards and anti-degradation rules are met and state classified water uses are supported for all water bodies.

Response: As part of the land health assessment effort, riparian proper functioning condition assessments (PFC) were completed by and interdisciplinary team of resource specialists on portions of the Dolores River, Coyote Wash and numerous contact seeps and springs within the allotment. Proper Functioning Condition is a qualitative survey used to assess the hydrology, vegetation and erosional/depositional processes of riparian areas. Based on this assessment it was determined that riparian areas within the allotment were making significant progress towards meeting Standard 2 for riparian and wetland areas. Please refer to the Affected Environment Section 3.3.3 for a discussion of the Wetlands/Riparian Zones beginning on page 49 of the EA. The affected environment section of the EA indicates that the Dolores River is dominated by Cottonwoods, box elder, privet, and willow species, and that all other major drainages are primarily intermittent and/or ephemeral drainages that flow only in response to runoff events. Therefore, these ephemeral systems may or may not support discontinuous patches of riparian vegetation due to limited amounts of water in these systems.

In addition, many of the seeps and/or springs found in the allotment were determined to be either small contact springs located where there is an impermeable geologic layer found beneath a permeable geologic layer or seep-infiltration springs occurring in channels where a stream has down cut or where there is up-thrusting geology. Because of the relative small size and locations of contact springs the potential for riparian vegetation is limited or lacking, while seep-infiltration springs are usually marked by individual Cottonwoods at the source and small patches of riparian vegetation to include willows continuing a short way down from the source.

Therefore, based on the analysis of riparian conditions contained in the environmental assessment it can be inferred that the allotment is consistent with the broad scale desired condition or goal contained in 2.6.3 pertaining to quantity and quality of aquatic habitats being maintained or enhanced for long-term sustainability of biological diversity.

In regards to the broad scale desired condition or goal contained in 2.7.1 pertaining to state water quality standards please refer to Section 1.8 on page 12 of the EA for a discussion on water quality. In summary, the State of Colorado did not list any portions of the Dolores River or other tributaries within the Gypsum Valleys Allotment as having water quality problems and they were not included on their published Monitoring and Evaluation List (CDPHE-WQCD, June 2010, Regulation No. 94). Therefore, the analysis contained within the EA did not identify water quality as an issue.

12. No water quality monitoring has been implemented in the DN to insure this requirement is met.

2.7.16 All water developments for federal purposes have state water rights, if applicable. The beneficial use of water continues over the implementation life of the RMP, when water is available.

2.7.17 All approved water developments that involve the use of TRFO lands are permitted pursuant to applicable federal authorization.

Response: Neither the EA or the Proposed Grazing Decision propose construction of any new water developments within the allotment. Therefore, the desired conditions or goals contained in 2.7.16 and 2.7.17 do not apply.

- 13. It appears there are a wide range of water developments that were constructed illegally by the permittee, which the EA is sweeping under the rug by using this decision process to authorize them, but the NEPA document contains no analyses of the impacts of the water developments or whether they all comply with the above two requirements.
 - 2.7.21 Over the life of the RMP, implement BMP's to minimize management impacts to water quality. The effectiveness of BMPs will be improved if necessary through adaptive management.

Response: Appendix F of the EA contains a list of all existing range improvements that have been constructed on federal lands within this allotment. None of the improvements listed in Appendix L were constructed illegally by the permittee. BLM's documentation for these improvements shows that construction occurred as early as 1940 and continued up through 1995. Approval for the construction of these range improvements were authorized either by the Department of Interior, Division of Grazing or the Bureau of Land Management depending on the year they were constructed. The EA and the proposed decision identifies potential impacts from continued maintenance activities by the permittee for those range improvements that have an existing authorized Cooperative Range Improvement Agreement or Section 4 Range Improvement Permit. Design criteria identified to be included on the term grazing permit as a stipulation provides for BLM to assess existing range improvement structures that are not currently authorized will be assessed for determining whether or not they may be needed for facilitating proper grazing management activities. If it is a determination made that all or some are necessary, the the appropriate clearances and/or surveys will be completed for determining if it is feasible to authorize them for maintenance. Please refer to Section 2.8, Design Feature number 12 and 13 on page 26 of the EA for stipulations pertaining to existing range improvements.

14. No discussion or implementation of these BMP's has been provided in the EA and DN.

2.7.28 Activities must not be allowed within aquatic management zones that will cause long-term change from desired conditions. The protection or improvement of riparian values, water quality, aquatic community, and for long-term stream health in these areas must be emphasized. Aquatic management zones have a minimum horizontal width from the top of each bank of 100 feet or the mean height of the mature late-seral vegetation, whichever is greater.

2.8.12 Project-level NEPA analysis and decisions, and the resultant AMP's, must identify key herbaceous and woody plant species and their respective utilization guidelines.

Response: Please refer the response to protest point number 2 and 6 pertaining to the management action 2.7.28 which applies to aquatic management zones. The analysis contained within the EA identified that the existing riparian and wetland areas within the Gypsum Valleys Allotment were making significant progress towards meeting the Colorado Public Land Health Standard #2 for riparian systems under the current grazing management. Furthermore, the analysis contained in the EA determined that riparian/wetland systems would continue to make significant progress towards meeting the riparian standard under the proposed livestock management actions put forth in the proposed grazing decision. Please refer to Section 4.2.1.3 of the EA regarding wetlands/riparian zones and Section 4.2.3 regarding upland soils. Therefore, the proposed action is consistent with the Guideline outlined in 2.7.28 for aquatic management zones.

In regards to Guideline 2.8.12 the Adaptive Management Alternative and the subsequent Proposed Grazing Decision identifies acceptable utilization levels for key forage herbaceous forage species within the allotment at either 30% or 40% depending on the pasture. An acceptable utilization level of 50% on key browse species would be adhered to as identified in the RMP on page II-52.

15. This has not been complied with.

2.17.20 Activities that could adversely affect sites eligible or potentially eligible for the NRHP should avoid these sites by of minimum of 300 feet, unless otherwise specified by the Authorized Officer, and/or unless other mitigating measures are developed.

Response: The grazing alternatives analyzed within the EA contained design criteria to be included as stipulations to the term grazing permit which pertain to the protection of cultural resources. Specifically, these stipulations would require modification of the term grazing permit if it were determined that cultural resources were being impacted from

authorized livestock grazing. Please refer to Section 2.8, Design Features 5, 6, 7 and 11 which are specific to cultural resources. These design criteria were also included in the proposed grazing decision.

16. For Gypsum Valleys ACEC:

- 3.6.1 Biological soil crusts have high cover and are maintained or increased on the soils of this ACEC.
- 3.6.8 Management activities should minimize, and attempt to avoid where possible, soil displacement, compaction, and trampling in the Gypsum Valleys ACEC in order to protect special status plant species and their habitat. Any activities should occur when the plants and soils are least vulnerable to disturbance, such as when soils are frozen or snow covered.
- 3.6.9 Management activities should minimize impacts to nesting raptors and desert bighorn sheep. Potential impacts to raptors include excessive noise and human disturbance during critical nesting periods. Potential impacts to desert big horn sheep include conflicts during critical lambing times and concentrated winter use.

Response: The environmental effects discussed in Section 4.2.3.1 for uplands soils concludes that with implementation of the Adaptive Management Alternative (Alternative C), upland soils conditions would improve within the allotment to include the ACEC. Specifically, soil surface resistance to erosion is expected to improve, a reduction in soil surface loss, improved infiltration, reduction in amount of bare ground and an increase in biological soil crusts.

In addition, the analysis in the EA in Section 3.3.9 beginning on page 60 determined that livestock grazing was not impacting the special status plant species primarily Gypsum Valley cat-eye (*Cryptantha gypsumsophila*) and associated sensitive plant species. The analysis in the EA in section 3.3.8 beginning on page 59 also determined that there would be little or no impact to the overall habitat for desert bighorn sheep and nesting raptors such as Golden eagles which nest on the cliff faces within Gypsum Valleys.

Therefore, the Adaptive Management Alternative (Alternative C) is consistent with the broad desired condition or goal for biological soil crusts contained in 3.6.1 as well as guidelines or management actions 3.6.8 and 3.6.9.

17. No actions have been implemented to comply with these requirements.

Appendix U

The Gypsum Valley nominated ACEC meets both the relevance and importance criteria so it was identified as a potential ACEC and further analyzed in the BLM planning process. In addition to the general management prescriptions, special management attention (in the form of additional management prescriptions specific to this ACEC, as described above) is needed to protect the outstanding and vulnerable relevance values within this ACEC because this ACEC is subject to many ground-disturbing management activities (including off-road-vehicle use, livestock grazing, and oil and gas development) that could disturb many acres; because the relevance values are subject to competition from invasive plants (brought in on the extensive road network within the ACEC), which could quickly become established on the many acres affected by the many ground-disturbing management activities associated with this ACEC; because this contains three occurrences of a G1 ranked species (Lecanora gypsicola), five occurrences of a G2 ranked species (Gypsum Valley cateye), three occurrences of an S1 ranked species (nodule cracked lichen Acarospora nodulosa var. nodulosa, and an occurrence of S1 ranked Nealley's dropseed, all of which are highly vulnerable to disturbance and extinction; because of the significance of the habitat within this ACEC since the ACEC contains such a large portion of the entire range, much of the total known habitat, and many of the total documented occurrences of Gypsum Valley cat-eye, and the gypsum rim lichen is easily disturbed and highly erosive; because this site has a biodiversity rank B1 for outstanding biodiversity significance; and because this area is easily accessible (highly roaded and relatively flat topography). (emphasis added)

A review of the rationale for designating the ACEC, in no way supports the BLM's position that livestock grazing has no impact to the values for which the ACEC was established. In fact, just the opposite is the case. Clearly, given the resources, issues and concerns discussed in the rationale show that livestock grazing is likely to have significant impacts on many of the resources that the ACEC was established to protect. A view of the ACEC map, see attached, show that the ACEC covers much of the area where livestock grazing is concentrated. The BLM's current assertions in the EA are unsupportable and arbitrary.

Response: The Gypsum Valley Area of Critical Environmental Concern (ACEC) contains approximately 13,135 acres of BLM administered lands within Big and Little Gypsum Valleys. The boundaries were based on a combination of existing topographical features such as prominent cliff bands, ridgelines and existing county roads that were easily identifiable by land managers as well as the public. As a result, the overall size of the ACEC (13,135 acres) is a direct result of the selected boundary location not the extent of the existing gypsum soil features that support the Gypsum Valley cat-eye and associated species for which the ACEC was established. The analysis within the EA addressed the existing resource conditions and potential environmental effects of all alternatives on the existing conditions for the allotment which includes the ACEC. Within the ACEC there are actual only approximately X acres of the gypsum soils that support these sensitive plant communities.

The environmental assessment concluded that current livestock grazing was not was not having direct or indirect impacts on existing habitat for the Gypsum Valley cat-eye and

associated sensitive species for which the ACEC was designated. Please refer to Section 3.3.9 of the EA. The analysis did conclude that off road vehicle use was having an impact to some of the known populations of Gypsum Valley cat-eye and associated sensitive plants. The purpose and need of the EA was to specifically analyze the impacts to existing resource from the authorization of livestock grazing. Motorized use to include off road travel within the ACEC will be specifically addressed as part of the upcoming travel management planning effort for the Tres Rios Field Office.

Furthermore, the Adaptive Management Alternative (Alternative C) analyzed in the EA and included in the proposed grazing decision contain livestock grazing management actions as described in response to protest point #4 which apply to the ACEC as well.

18. Clearly the pathetic changes proposed will not result in "significant progress" towards meeting the Rangeland Health Standards which "must also be as expeditious and effective as practical." Unless you are mis-defining "practical" as only that which the welfare ranchers in question like.

Response: 43 CFR 4180 of the grazing regulations requires the authorized officer to take appropriate action under subparts 4110, 4120, 4130 and 4160 of the grazing regulations that will result in significant progress towards fulfillment of the Standards for Rangeland Health. Furthermore, the BLM's Rangeland Health Standards Manual (H-4180-1) defines **significant progress** as "Movement toward meeting standards and conforming to guidelines that is acceptable in terms of rate and magnitude. Acceptable levels of rate and magnitude must be realistic in terms of the capability of the resource, but must also be as expeditious and effective as practical"

The Environmental Assessment contained three alternatives that proposed a reduction in permitted AUMs in accordance with 43 CFR 4110.3-2, as well as other proposed actions in accordance with 43 CFR 4120 and 4130. These alternatives included Alternative A (Permittee Proposed Action), Alternative C (Adaptive Management Alternative), Alternative C (Reduced Grazing Alternative) and Alternative E (No Grazing Alternative).

The Adaptive Management Alternative which is the BLM's preferred alternative proposes reductions in grazing levels from those that are currently authorized from 1,807 to 1,761 AUMs. The 2006 Rangeland Health Assessment estimated that there were approximately a total of 1,955 AUMs available for livestock grazing. In addition, the available forage production estimate from the 2006 Rangeland Health Assessment of 1,955 AUMs did not include 1) portions of the allotment with slopes greater than 40%; 2) only 70% of the potential production was used for estimating carrying capacity on portions of the allotment identified as having a slight to moderate departure from biotic

integrity; **3**) only 50% of potential production was used for estimating carrying capacity on portions of the allotment identified as having a moderate departure from biotic integrity; **4**) only 30% of potential production was used for estimating carrying capacity on portions of the allotment identified as having a moderate to extreme departure from biotic integrity; and **5**) only 10% of potential production was used for estimating carrying capacity on portions of the allotment identified as having an extreme to total departure from biotic integrity allocated. Therefore, the proposed stocking level of 1,761 AUMs is significantly lower than what the allotment actually provides for based on the 2006 Rangeland Health Assessment.

More importantly, this alternative also proposes to incorporate several changes to current grazing management as per 43 CFR 4120 and 43 CFR 4130 and in accordance with the Colorado Livestock Grazing Management Guidelines developed as part of the Public Land Health Standards for Colorado. Specifically, the adaptive management alternative 1) implements an intensive 3-year deferred rotational grazing system that will defer livestock grazing during the critical spring growing season on a consistent basis for all pastures. Within the Big Gypsum Valley portion of the allotment there are six pastures. The proposed grazing rotation defers grazing use during the critical growing season in 2-3 of the 6 pastures every year. At the end of the 3-year rotation all pastures will have receive at least one year rest from livestock grazing during the critical spring growing season and at least 3 years rest out of the 10-year term of the grazing permit. Within the Little Gypsum Valley portion of the allotment there are six pastures also. The proposed grazing rotation will defer grazing during the critical spring growing season every year for two of the pastures and every other year for the remaining 4 pastures and at least 5 years rest out of the 10-year term of the grazing permit.

By providing existing plant communities regular rest during the critical growing season, plant communities will have the opportunity to regularly complete their lifecycles, set seed, and rebuild root reserves without the pressures from livestock grazing. In addition, the amount of litter accumulation should improve and the amount of bare ground should decrease to what is expected based on site potential; 2) the adaptive management portion of this alternative establishes utilization limits on both herbaceous and shrub forage species of either 30% on those pastures that are not meeting rangeland health standards or 40% on those pastures currently meeting rangeland health standards. Based on comments received to the draft analysis, the utilization thresholds for the Adaptive Management Alternative have been revised as follows. If monitoring indicates that the established utilization levels have been exceeded two or more years (not necessarily consecutive years) in the same pasture over a five year period, the amount of grazing time in that pasture would be reduced proportionally to the amount in which utilization levels were exceeded. For example if the actual use indicated that a pasture was used for 30

days and utilization monitoring indicated that average use levels were exceeded by 20% over two years, the amount of grazing time allowed in that pasture would be reduced from 30 days to 24 days for the remaining life of the 10-year term grazing permit. If the number of days are reduced in a pasture, then the day cattle leave the allotment in the spring would be reduced by that number of days, unless utilization studies with at least two years of data show that actual grazing use in other pastures have resulted in utilization levels far below the 30% or 40% allowable limit. If this proves to be the case then some of the time reduced may be made up in these pastures. The intent of this adaptive management is to allow for additional adjustments to grazing levels if they are determined needed through utilization monitoring over a five year period during the life of the 10-year term grazing permit; 3) drought management actions have been included as part of this alternative which allows for immediate actions such as temporary or partial closure of the allotment to grazing, temporary reductions in livestock numbers or grazing duration, temporary change in season of use outside critical growth periods of plant communities and temporary water hauling to improve livestock distribution to areas of the allotment where adequate forage exists; and 4) additional design criteria have been included as part of this alternative to further mitigate impacts of livestock to vegetation communities, riparian resources, cultural resources, spread of noxious weeds and wildlife species.

Therefore, the combination of these grazing management actions meet the requirements contained in 43 CFR 4180 and should result in making significant progress towards conforming to the Public Land Health Standards developed for Colorado.

19. The BLM maintains the same livestock numbers, the same number of AUM's the same season of use and the same rotations but expects everything to be corrected by the application of a somewhat reduced utilization rate, something the BLM rarely has monitored in the past.

Response: The Adaptive Management Alternative which is the BLM's preferred alternative and contained in the proposed decision proposes reductions in grazing levels from those that are currently authorized from 1,807 to 1,761 AUMs. The 2006 Rangeland Health Assessment estimated that there were approximately a total of 1,955 AUMs available for livestock grazing. In addition, the available forage production estimate from the 2006 Rangeland Health Assessment of 1,955 AUMs did not include 1) portions of the allotment with slopes greater than 40%; 2) only 70% of the potential production was used for estimating carrying capacity on portions of the allotment identified as having a slight to moderate departure from biotic integrity; 3) only 50% of potential production was used for estimating carrying capacity on portions of the allotment identified as having a moderate departure from biotic integrity; 4) only 30% of

potential production was used for estimating carrying capacity on portions of the allotment identified as having a moderate to extreme departure from biotic integrity; and 5) only 10% of potential production was used for estimating carrying capacity on portions of the allotment identified as having an extreme to total departure from biotic integrity allocated. Therefore, the proposed stocking level of 1,761 AUMs is significantly lower than what the allotment actually provides for based on the 2006 Rangeland Health Assessment.

More importantly, this alternative also proposes to incorporate several changes to current grazing management as per 43 CFR 4120 and 43 CFR 4130 and in accordance with the Colorado Livestock Grazing Management Guidelines developed as part of the Public Land Health Standards for Colorado. Specifically, the adaptive management alternative 1) implements an intensive 3-year deferred rotational grazing system that will defer livestock grazing during the critical spring growing season on a consistent basis for all pastures. Within the Big Gypsum Valley portion of the allotment there are six pastures. The proposed grazing rotation defers grazing use during the critical growing season in 2-3 of the 6 pastures every year. At the end of the 3-year rotation all pastures will have receive at least one year rest from livestock grazing during the critical spring growing season and at least 3 years rest out of the 10-year term of the grazing permit. Within the Little Gypsum Valley portion of the allotment there are six pastures also. The proposed grazing rotation will defer grazing during the critical spring growing season every year for two of the pastures and every other year for the remaining 4 pastures and at least 5 years rest out of the 10-year term of the grazing permit.

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from 30 days to 24 days for the remaining life of the 10-year term grazing permit. If the number of days are reduced in a pasture, then the day cattle leave the allotment in the spring would be reduced by that number of days, unless utilization studies with at least two years of data show that actual grazing use in other pastures have resulted in utilization levels far below the 30% or 40% allowable limit. If this proves to be the case then some of the time reduced may be made up in these pastures. The intent of this adaptive management is to allow for additional adjustments to grazing levels if they are determined needed through utilization monitoring over a five year period during the life of the 10-year term grazing permit; 3) drought management actions have been included as part of this alternative which allows for immediate actions such as temporary or partial closure of the allotment to grazing, temporary reductions in livestock numbers or grazing duration, temporary change in season of use outside critical growth periods of plant communities and temporary water hauling to improve livestock distribution to areas of the allotment where adequate forage exists; and 4) additional design criteria have been included as part of this alternative to further mitigate impacts of livestock to vegetation communities, riparian resources, cultural resources, spread of noxious weeds and wildlife species.

Therefore, the combination of these grazing management actions meet the requirements contained in 43 CFR 4180 and should result in making significant progress towards conforming to the Public Land Health Standards developed for Colorado.

20. In fact, the reality is that the DN permits more AUM's/livestock than has been actually used over many years.

Response: The average actual use for the allotment between 1999 and 2014 was 1,890 AUMs. The proposed grazing level contained in the decision is 1,761 AUMs.

21. #9 of the "design criteria" (whatever that means, are these requirements or good intentions?) lacks any requirement to actually do the monitoring needed for this to even be triggered in the first place. So it looks good on paper but is meaningless in practice.

Response: The design criteria contained in Section 2.8 starting on page 24 of the EA and included in the proposed decision are specific terms and conditions that are contained within the term grazing permit.

These terms and conditions are consistent with 43 CFR 4130.3 of the grazing regulations which state: "Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve management and resource condition objectives for the public lands and other lands administered by the

Bureau of Land Management, and to ensure conformance with the provisions of subpart 4180 of this part."

Term and Condition # 9 is intended to assist in protecting as of yet identified cultural resources from potential damage by livestock grazing within the allotment. This specific term and conditions states "If it is determined through monitoring that authorized grazing use by livestock is damaging existing cultural sites within the allotment then appropriate mitigation measures will be developed and implemented in order to address the effects. If appropriate mitigation measures cannot be implemented and continued livestock use is jeopardizing cultural resources on public lands within the allotment, the grazing permit may be modified or cancelled in whole or in part to address the effects."

Environmental Effects Section 4.2.1.9 of the EA found on page 70 addressing cultural resources identified the need for additional mitigation measures to avoid adverse effects to unidentified cultural resources that may occur in the project area from livestock grazing. The EA further states that additional surveys of the project area will be conducted over the life of the permit. The results of future survey will influence additional literature review, survey, monitoring, avoidance, and consultation, as discussed in the associated cultural resources report. Term and Condition #9 would require additional mitigation measures for protecting newly discovered cultural sites.

22. Design Criteria #12 and #14 are similarly worthless. Which weed infested and which are not and how do the rotations match this? Again looks nice on paper but is meaningless in practice.

Response: After consideration of your protest points, the above terms and conditions pertaining to noxious weeds will not be carried forward in the final decision. Based on both the effected environment and environmental effects analysis of noxious weeds within the EA found in Sections 3.3.5 and 4.2.3.5 on pages 53 and 75 it was determined that existing noxious weed populations are contained to existing disturbance areas such as infrastructure associated with mining activities, existing roads and existing range improvements such as stock ponds. The analysis indicated that many populations of noxious weeds species have declined and/or remained stable. This can be attributed to the annual treatment efforts of noxious weeds by BLM, San Miguel County and mining operators. Therefore, at this time there has not been a need identified for requiring further noxious weed restrictions on grazing management. If in the future, the need for further requirements relating to noxious weeds is identified then additional stipulations can be added to the grazing permit.

23. Design Criteria #16 authorizes illegally created 'range improvements' with no NEPA.

Response: Appendix F of the EA contains a list of all existing range improvements that have been constructed on federal lands within this allotment. None of the improvements listed in Appendix L were constructed illegally by the permittee. BLM's documentation for these improvements shows that construction occurred as early as 1940 and continued up through 1995. Approval for the construction of these range improvements were authorized either by the Department of Interior, Division of Grazing or the Bureau of Land Management depending on the year they were constructed.

In addition, this term and condition has been re-written to clarify that the appropriate environmental analysis as required by NEPA will be completed as part of authorizing additional range improvements.

24. The allotment is a narrow corridor yet provides no information on how livestock will be moved to non-adjacent pastures, what the impacts to BSC or resources supposedly protected under the ACEC from these regular movements. In fact no information at all is provided comparing current BSC conditions to similar soils that have not been grazed by livestock. No information is provided regarding the condition of and impacts to the resources the ACEC was established to protect.

Response: The trailing of cattle through pastures not scheduled for use will be authorized as part of the planned grazing rotations. Typically, any such trailing will only be authorized for a short period of time 1-2 days depending on the situation. The analysis analyzed the impacts of livestock use on biological soil crusts which are consistent with livestock trailing activities.

Please refer to BLM's responses to protest points # 16 regarding livestock impacts to biological soil crusts and the Gypsum Valleys ACEC.

25. The DN authorizes changes to the utilization rate, but nowhere in the EA are the impacts of these adjustments provided.

Response: The Adaptive Management Alternative (Alternative C) described in Section 2.4 beginning on page 17 of the EA specifically included the flexibility to further adjust up or down the established utilization levels depending on land health conditions. Therefore, this action was analyzed in the EA. The intent of this potential action is to give BLM the flexibility to further limit or expand utilization levels depending on land health conditions.

26. Let's examine now the "short term monitoring objectives" provided on page 6 of the DN. Firstly, #1 only requires 51% "a majority" of the sites to show an improvement, a very

low bar given the extremely degraded conditions. And that only from sites where the transects have found those key species (what about transects with no Indian ricegrass on the transect but is present in the larger area?). Then to make matters worse, the DN states merely maintaining grazing tolerant warm season increasers species is sufficient to meet short term objectives (the use of the words "and/or" allow either to fulfill the requirement).

Then the actions to be taken "may be implemented" or may not be implemented. The DN provides to massive 'do nothing' loopholes. A third loophole is provided in action #2 as the spring use is not eliminated, merely reduced. Is that reduced 1 day? Under the terms of the decision, that's plenty.

Response: The short-term monitoring objective referred to above specifically states the following: "Within five years show a statistically significant increase in the amount of native perennial cool season bunchgrass species on a majority of those existing long-term trend transects in which these species currently exist. This data will be analyzed at the 80% confidence interval."

This objective is being measured by using the existing established nested frequency trend plots within the allotment. This methodology only measures the percentage of possible plots within a sampled area occupied by a target species, or in other words it describes the abundance and distribution of species expressed as a percentage and is useful for detecting changes in plant communities over time. However, this methodology does not give any information on species composition only species presence.

However, a limitation of this methodology for detecting change is that the frequency of a given species must generally have a minimum occurrence of 20% and no greater than 80% on the sampling site.

Existing trend data collected on the allotment in 1981, 1986, 1987, 1988 and 1992 on indicates that a majority of these trend monitoring transects locations have never recorded a 20% or greater frequency of cool season perennial grass species.

Therefore, because of the limitation described above regarding the difficulty in detecting change, the objective for a statistical increase in the frequency of occurrence of cool season perennial grass species on a majority of the existing trend transect as opposed to every transect was determined to be reasonable for determining if there is an upward trend in cool season perennial grass species. Again, the intent of this short-term monitoring objective is to help in determining if the grazing management actions being

implemented are in fact facilitating an increase in the abundance of desired cool season perennial grass species on the allotment.

In regards to the existing desirable warm season perennial grass species, the land health assessment analyzed in the EA and did not identify the loss of desirable warm season perennial grass species to be an issue affecting the plant community. Therefore, the objective to at least maintain or increase these warm season perennial grass species is reasonable and prudent.

When taken in context, one or both of the management actions to combine cattle into one herd and shorten the grazing season during critical spring growing season identified as part of the short-term monitoring objectives would be implemented if short-term trend monitoring indicates that the objective for increasing cool season perennial grass species is not being met. Any potential reduction in the amount of grazing time during the critical spring grazing season will be consistent with the Reduced Grazing Alternative (Alternative D) analyzed in the EA.

27. The drought section fails to define triggers and the actions listed "may be implemented" or may not be implemented.

Response: The United States Drought Monitor will be the primary resource used for determining local drought conditions and subsequently triggering any drought management actions. If it is determined that temporary adjustments in livestock grazing management are needed as a result of drought conditions then one or more of the management actions identified in the proposed grazing decision would be implemented.

28. In the long term section, we see if a transect has one Indian ricegrass plant and in 10 years it has two, then the objective is met more than five times over.

Response: Please see response to protest point # 26 above.

29. All the degradation of the allotment discussed in the EA are merely obvious symptoms of long term and severe overstocking, yet the EA is silent regarding what a rational stocking rate and season of use is.

Response: The rangeland health assessment and subsequent determination document identified other activities other than current livestock grazing management that has also contributed to degraded resource conditions resulting in non-attainment of rangeland health standards. These activities included 1) long term effects of historical grazing practices, 2) historical prairie dog towns, 3) previous failed land treatment activities

which disturbed existing vegetation resources and soils, **4**) weed infestations from abandoned agricultural lands; and **5**) impacts from old homesteads, mining, roads, power lines, seismic surveys and historic landing strips.

The environmental assessment contained several alternatives that analyzed different stocking levels and seasons of use for this allotment. The Adaptive Management Alternative which is the BLM's preferred alternative contained in the proposed grazing decision proposes reductions in grazing levels from those that are currently authorized from 1,807 to 1,761 AUMs. Furthermore the 2006 Rangeland Health Assessment estimated that there were approximately a total of 1,955 AUMs available for livestock grazing. In addition, the available forage production estimate from the 2006 Rangeland Health Assessment of 1,955 AUMs did not include 1) portions of the allotment with slopes greater than 40%; 2) only 70% of the potential production was used for estimating carrying capacity (available AUMs) on portions of the allotment identified as having a slight to moderate departure from biotic integrity; 3) only 50% of potential production was used for estimating carrying capacity on portions of the allotment identified as having a moderate departure from biotic integrity; 4) only 30% of potential production was used for estimating portions of the allotment identified as having a moderate to extreme departure from biotic integrity; and 5) only 10% of potential production was used for estimating carrying capacity on portions of the allotment identified as having an extreme to total departure from biotic integrity allocated. Therefore, the proposed stocking level of 1,761 AUMs is significantly lower than what the allotment actually provides for based on the 2006 Rangeland Health Assessment.

In addition, BLM's preferred Adaptive Management Alternative (Alternative C) also establishes utilization standards and an adaptive management approach which requires appropriate adjustments to grazing levels if utilization monitoring as described in the adaptive management alternative indicates a need. The intent of this adaptive management alternative is to allow for adjustments of the stocking levels and season of use through monitoring of utilization levels for the life of the 10-year term grazing permit. This actions is consistent with 43 CFR 4110.3 Changes in permitted uses which states in part "The authorized officer shall periodically review the permitted use specified in a grazing permit or lease and shall make changes in the permitted use as needed to manage, maintain or improve rangeland productivity, to assist in restoring ecosystems to properly functioning condition..."

30. Page 18 states that key areas would be ¼ to ½ mile from water, but this ignores the fact that most of the cattle use and therefore impacts occur within ¼ mile from water. To make matters worse, it appears that about half the grazable acres on the entire allotment are within the ACEC yet nothing is done to monitor impacts from livestock grazing on ACEC values.

Response: Interagency Technical Reference 1734-03 Utilization Studies & Residual Measurements gives BLM guidance on site selection for utilization monitoring locations as well as utilization monitoring methods and techniques. TR 1734-03 defines a key area as "...indicator areas that are able to reflect what is happening on a larger area as a result of on-the ground management actions. A key area should be a representative sample of a large stratum, such as a pasture, grazing allotment, etc..." Furthermore, this technical reference identifies selection criteria for selecting key areas which includes the following. "A key are: Should be capable of, and likely to show, a response to management actions. This response should be indicative of the response that is occurring on the stratum."

Therefore, the general requirement contained in the Proposed Decision for locating utilization monitoring points between ¼ and ½ mile away from livestock waters will be removed and replaced in the Final Decision with the following: "Utilization data will be collected in areas of a pasture that receive a representative amount of utilization and has the potential to reflect changes in grazing management over time".

In practice if utilization monitoring sites are located at a distance to far for livestock to travel from available water sources, these sites would not accurately reflect the grazing pattern and/or utilization level that is occurring within a given pasture because they would consistently record no use. Conversely, if utilization monitoring sites are placed to close to water sources, the utilization data collected would be skewed to heavy use and would not represent use patterns or overall utilization within a given pasture.

The Gypsum Valleys ACEC occurs within the boundaries of the Bullington, Magpie, Carnation, The Gap, West Lavender, East Lavender Hughes Gyp and Dunham Pastures of the Gypsum Valleys Allotment. Utilization monitoring as well as the additional monitoring efforts as identified in Monitoring and Assessment Section on page 7 of the Proposed Grazing Decision will also occur in these pastures to include portions of the ACEC. This monitoring information will be used to monitor impacts from grazing to the values of the ACEC.

31. The DN puts in place a 30 or 40% utilization limit "removed by weight for herbaceous and shrub species that provide forage value for livestock". Another massive loophole. What exactly are these herbaceous and shrub species? Since cattle don't prefer shrubs we can only assume that these are averaged in order to benefit the permittee. 50% on grasses and 10% on shrubs makes a nice clean 30% and everyone is happy, except for the grass species, particularly the cool season bunch grasses you are supposedly trying to recover.

Response: The utilization limits of either 30 or 40% are specific to either herbaceous perennial grass species only or palatable shrub species only. Utilization levels on palatable shrub species will not be combined with utilization of perennial grass species for determining average utilization. Herbaceous species include both perennial cool season and warm season grasses. Shrub species occurring on the allotment that are either considered highly or moderately palatable to livestock as per the range site descriptions developed by the Natural Resource Conservation Service particularly include fourwing saltbush, winterfat, and shadscale. Livestock tend to select for palatable shrub species during the fall/winter period due to the higher concentration of protein.

32. The same problem further dilutes the value of 30% when you look at warm season versus cool season. Having reviewed thousands of utilization forms, it is always the case that warm season utilization is 20-50% less than cool season species. So again, you can have 50% on Indian ricegrass and 10% on Galleta and according to the BLM's decision everything is great, but it is not in reality.

Response: Currently, the acceptable limit on utilization levels for this allotment is 50% as identified in the TRFO RMP. The EA and proposed grazing decision reduces this acceptable utilization limit by 10% or 20% on all the existing pastures within the allotment. Therefore, in all pastures the current acceptable utilization level has been reduced by 10 - 20% with the majority of pastures reduce 20%

Both perennial warm season and cool season grass plant communities do not occur evenly distributed across the allotment or even within pastures due to slopes, aspect and soil types. In some areas, warm season grass species dominate and in other areas cool season grass species dominate the understory. Warm season perennial grass plant communities are just as important for maintaining a functional healthy ecosystem as are cool season perennial grass species. Therefore, in areas where cool season perennial grass species will factor more heavily into whether or not the acceptable utilization limit has been met and vice versus with areas dominated by warm season perennial grass species. The intent of establishing these utilization limits is to reduce the overall grazing impact to both warm and cool season grass species allowing for re-growth, seed dissemination and rebuilding of root reserves.

33. The biggest problem on the allotment is the loss of cool season bunch grasses, which are the weak link in the chain, yet the plan is written manages for shrubs and warm season species which are both increasers under grazing pressure. This problem needs to be corrected. The 30% must be put on each category separately and exceeding any one drives changes.

Response: Please refer to BLM response to protest point #32 above.

34. The DN fails to provide any actions if long term objective are not met.

Response: The long-term objectives contained in the proposed decision are 10-year objectives. This timeframe coincides with the term of the grazing permit of 10 years. At the end of the 10-year evaluation period the term grazing permit will be expiring and a new analysis will need to be undertaken to consider renewal of the permit. If it is determined through this analysis that the long-term objectives for the allotment have not been met and existing grazing is still a causal factor, appropriate grazing management alternatives will be developed as part of the renewal process which will include additional changes in grazing management.

35. No mention of the method to be used for measuring "by weight" is provided.

Response: Our assumption based on your comment is that you are referring to the utilization monitoring identified in the proposed grazing decision and EA. As defined in Technical Reference 1734-03 "Utilization Studies & Residual Measurements" utilization is defined as the percentage of available forage (weight or numbers of plants, twigs, etc.) that has been consumed or destroyed. Utilization is expressed in terms of the current year's production removed. Therefore, the EA and proposed grazing decision identify that utilization will be measured as a percentage of weight.

36. As stated previously but ignored, BLM regulations impose additional requirements, including that "authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment." 43 C.F.R § 4130.3-1(a). The regulation defines "livestock carrying capacity" as "the maximum stocking rate possible without inducing damage to vegetation or related resources." 43 C.F.R. § 4100.0-5 (emphasis added).

Response: As addressed in your previous comments to the Final Environmental Assessment, the EA contained several alternatives that analyzed different stocking levels and seasons of use for this allotment. The Adaptive Management Alternative (Alternative C) which is the BLM's preferred alternative and included in the proposed grazing decision, proposes reductions in grazing levels from those that are currently authorized from 1,807 to 1,761 AUMs. Furthermore the 2006 Rangeland Health Assessment estimated that there were approximately a total of 1,955 AUMs available for livestock grazing. In addition, the available forage production estimate from the 2006 Rangeland Health Assessment of 1,955 AUMs did not include 1) portions of the allotment with slopes greater than 40%; 2) only 70% of the potential production was used for estimating carrying capacity (available AUMs) on portions of the allotment identified

as having a slight to moderate departure from biotic integrity; **3**) only 50% of potential production was used for estimating carrying capacity on portions of the allotment identified as having a moderate departure from biotic integrity; **4**) only 30% of potential production was used for estimating portions of the allotment identified as having a moderate to extreme departure from biotic integrity; and **5**) only 10% of potential production was used for estimating carrying capacity on portions of the allotment identified as having an extreme to total departure from biotic integrity allocated. Therefore, the proposed stocking level of 1,761 AUMs is significantly lower than what the allotment actually provides for based on the 2006 Rangeland Health Assessment.

37. Just because livestock grazing may occur within the Gypsum Valleys ACEC, does not obviate the need to examine impacts to ACEC protected resources and to provide actions to protect those resources. The excuse provided on page 12 of the EA evades the issue.

Response: Please refer to BLM's response to protest point #17 regarding the ACEC.

38. The Holechek textbook as well as the NRCR Range and Pasture Handbook summarize current range science and find that a maximum of 25% harvest coefficient is the maximum that can sustain be sustained in the arid west: "use of a harvest coefficient higher than 25% leads to land degradation" Holechek et al. Fifth Edition. Beyond that, merely reducing a theoretical utilization rate without adjusting the stocking rate so that utilization rate can be met is a recipe for failure.

Response: Put into context Range Management, Principles and Practices (Holechek et al.) finds that "35% to 45% use of grazable forage will generally maintain range health on semiarid (shortgrass) grassland ranges where brush encroachment is not a problem. In the more arid regions (under 300 mm of mean annual precipitation) of the Southwest and intermountain areas, utilization levels between 25% and 40% are recommended." Therefore, the 25% utilization level represents the low end of the acceptable range of utilization, not the maximum accepted level recommended for maintaining forage production.

In addition, the Tres Rios Field Office, Resource Management Plan (RMP) identifies a maximum allowable use guideline of 50% utilization for those grazing management systems that implement a deferred rotation system.

The Adaptive Management Alternative establishes a deferred rotation grazing system but establishes a maximum utilization level of 30% within pastures where applicable rangeland health standards have not been met, and 40% in pastures where rangeland

health standards have been met. The established utilization standards are far below the allowable use standards identified in the RMP for the proposed grazing system. In regards to the stocking rate, the adaptive management alternative establishes 1) measurable utilization objectives for each pasture, 2) defines decision thresholds, in this case documentation of two years (not necessarily consecutive) over a five year period in utilization above the maximum acceptable levels identified by pasture; and 3) specific actions that will be taken in regards to grazing management if utilization thresholds have been exceeded.

The specific action identified in the adaptive management alternative is a reduction in grazing time proportional to the amount of excess utilization documented to have occurred. Utilization monitoring outlined in the adaptive management alternative will be used as an indicator to determine if the stocking rate is too high. Adjustments in the current grazing levels will be reduced accordingly as described in this alternative if utilization monitoring indicates a need. This will help refine the appropriate livestock stocking levels for this allotment.

39. The so-called 'adaptive management plan' does not conform with the foundational principles of adaptive management. We again provide some resources on how to implement adaptive management.

Response: The Adaptive Management Alternative beginning on page 17 of the Final Environmental Assessment and contained in the proposed grazing decision is consistent with the requirements of the Rangeland Health Standards Handbook (H-4180-1) and clearly defines 1) the desired future conditions for the allotment; 2) allotment specific monitoring objectives that are sensitive enough and established at the appropriate locations for detection of changes in range conditions; and 3) identifies appropriate time frames for data collection and evaluation. Furthermore, included in the Adaptive Management Alternative are grazing management actions to be implemented if it is determined through the identified monitoring that the allotment specific monitoring objectives have not been met.

40. Again, the EA fails to provide, or even discuss, whether the general upland monitoring of the revised EA, provides for determining whether standards are being met, or whether it is sensitive enough to detect deteriorating "achieving" areas or improving "non-achieving" areas.

This failure is further echoed in BLM TR 4400-7 which provides the BLM with detailed instructions on how to develop a monitoring plan. The BLM did not even discuss this policy, let alone implement it.

The TR at 33, for instance instructs the BLM on how to write management objectives: In order for management actions to be monitored and progress evaluated, the objectives must address <u>measurable attributes</u> of vegetation. The objective to "increase ground cover" does not tell the manager specifically what is expected to be accomplished. Nor does it tell the attribute that needs to be monitored. Compare that objective with "to increase basal cover of bluebunch wheatgrass from 2 percent to at least 5 percent by 1990"

Response: The monitoring plan identified in the EA as part of the Adaptive Management Alternative and carried forward in the proposed decision is consistent with Technical Reference 4400-7.

The EA and proposed grazing decision identify the frequency for analysis, interpretation and evaluation of monitoring data as follows:

Utilization: Both the EA and proposed grazing decision identifies 1) allowable utilization objective levels by pasture of either 30 – 40%; 2) schedules utilization data collection annually; and 3) identifies the frequency for evaluating this monitoring data to be within the first 5-years or less of the 10-year term grazing permit. This objective is consistent with TR 4400-7 which states in Section 5.8 on page 33 "Regardless of the long-term goals and objectives for the management area, evaluation of grazing effects over the short term (5-year) is usually based on utilization data and their correlation with known or estimated grazing use levels."

Short-Term Monitoring Objectives: Both the EA and proposed grazing decision identifies measurable allotment specific objectives used for assessing rangeland trend on the allotment. Trend studies are used to indicate the long-term trend of rangelands. For instance, an increase or decrease in frequency of desired cool season and/or warm season perennial grass species within the allotment or pasture. The monitoring objective identified in the EA has an objective for a statistical significant increase in the frequency of cool season bunch grasses on the allotment as measured at the 80% confidence interval, and an objective for maintaining or achieving a statistically significant increase in frequency of warm season perennial grass species as measured at the 80% confidence interval.

However, as discussed in BLM's protest response to protest point #26 a limitation of trend methodology for detecting change is that the frequency of a given species must generally have a minimum occurrence of 20% and no greater than 80% on the sampling site.

Existing trend data collected on the allotment in 1981, 1986, 1987, 1988 and 1992 on indicates that a majority of these trend monitoring transects locations have never recorded a 20% or greater frequency of cool season perennial grass species. Therefore, based on this limitation BLM determined that in the short-term any statistical improvement on both perennial cool season grasses and warm season grasses would reflect improvement. This is consistent with TR 4400-7 which states on in Section 5.8 on page 32 "In some cases, detection of a trend toward the desired value may be sufficient to justify continuation of the management practice being evaluated, especially on poor condition ranges where vegetation objectives will be attainable only in the long-term. In these cases, intermediate objectives may be useful in evaluating progress." The long-term monitoring objectives regarding trend discussed below specifically identify desired increases in the frequency of both cool season and warm season perennial grass species.

Long-Term Monitoring Objectives: Both the EA and proposed grazing decision identifies measurable allotment specific objectives used for assessing rangeland trend on the allotment over a 10-year period. The monitoring objective identified in the EA has an objective for 1) a statistically significant increase of $\geq 20\%$ over a 10-year period in the frequency of cool season bunch grasses as measured at the 80% confidence interval; 2) maintaining or a statistically significant increase of $\geq 20\%$ over a 10-year period in frequency of warm season perennial grass species as measured at the 80% confidence interval; and 3) Within 10-years decrease the amount of measurable bare ground by \geq 10% on the allotment.

Measurable objectives for maintaining or increasing cover of all perennial grass species identified in Long-Term Allotment Specific Objective #3 has not been developed at this time due to lack of baseline monitoring data. The monitoring section identified in the EA and carried forward in the proposed decision includes establishment of new monitoring sites following the protocol identified in BLM's Assessment, Inventory, and Monitoring strategy. Information obtained from these studies will supply the needed baseline cover data. Once baseline data is available, a specific measureable objective will be developed and included as part of the monitoring strategy.

Therefore, the monitoring objectives and process identified in both the EA and proposed grazing decision meets the requirements of TR 4400-7 contained in Section 5.8 beginning on page 32 which states in part 1) "In order for management actions to be monitored and progress to be evaluated, the objectives must address measurable attributes of vegetation."; and 2) "It is also important that management objectives be stated in terms that are reasonably attainable relative to the target itself and the time period over which it is to be attained."

41. Further undercutting the ridiculous 2.5% AUM reduction is the fact that average actual use over the last 15 years has been 15% BELOW the level the BLM is proposing.

Rationale: This comment is based solely on a comparison of average AUMs grazed with the maximum number of cattle and AUMs contained in the proposed adaptive management alternative and proposed grazing decision. The approached suggested in your protest point would retroactively penalize the grazing permittees for being responsible managers and voluntarily reducing livestock numbers to match resource conditions in poor production years resulting from either drought or drier than normal conditions. The availability of livestock water in earthen reservoirs is also a major factor in what areas within the allotment may be grazed from year to year. Authorizing grazing permittees to graze the permitted (maximum) number of cattle when resource conditions can support this, and to adjust numbers downward in years when livestock water and or forage are less abundant reflects responsible livestock grazing management.

42. At 30% utilization, each and every acre would need to provide 400 lbs. of forage. To not have an arbitrary and capricious decision, the BLM must provide facts that average forage production is equal to or greater than 400 lbs. per acre in order for its proposed decision authorizing 1761 AUM's. Much of the allotment is producing far below 400 lbs.

Response: The following factors were used in determining estimated carrying capacities for this allotment.

- 1) Acreages of the allotment with slopes greater than 40% were determined not suitable for grazing and were not used in allocating forage capacity for livestock.
- 2) Acreages with slopes less than 40% that were considered not productive such as large areas of isolated rock outcrops were not used in allocating forage capacity for livestock.
- 3) Acres with productive soils and less than 40% slopes were used in capacity estimates.
- 4) The average production in pounds per acre identified by the Natural Resource Conservations Service (NRCS) soil survey for each soil type was used in calculating potential AUMs.
- 5) (Average Production) X (50% utilization factor) ÷ (30.416667 days/month) X (29 lbs. per day dry forage requirement) = (Potential AUMs.)

6) The potential AUMs were then modified by the findings of the land health assessment rating for biotic integrity. For areas that were rated as having none to slight departure 100% of the potential AUMs were used; areas having slight to moderate departure. 70% of the potential AUMs were used; areas having a moderate departure 50% of the potential AUMs were used; areas having a moderate to extreme departure 30% of the potential AUMs were used; and areas having an extreme departure only 10% of the potential AUMs were used in calculating the estimated carrying capacity.

As a result of this analysis the potential AUMs as calculated from considering only the average production identified by the NRCS and using a 50% utilization factor for public lands within the allotment was 5,167 AUMs. The potential AUMs were further adjusted by the findings of the rangeland health assessment for biotic integrity as explained above. As a result the estimated carrying capacity was determined to be 1,955 AUMs for public lands.

Furthermore, the maximum carrying capacity (AUMs) analyzed in the BLM's preferred Adaptive Management Alternative is 1,761 AUMs which is 194 AUMs lower than the estimated capacity determined in the rangeland health assessment and 3,406 AUMs lower than the potential identified by the NRCS in the soil survey.

A summary of the estimated carrying capacity describing the analysis used for establishing the carrying capacity on this allotment has been incorporated into the final environmental assessment under the heading Capable Acres and Estimated Carrying Capacity within the Allotment.

The proposed maximum allowable utilization levels of either 30% or 40% are used as a grazing management tool for reducing the potential of over utilization by livestock regardless of what the actual carrying capacity is determined to be. In other words, monitoring of utilization allows for the removal of livestock from a given pasture and/or allotment when it is determined that use levels have been reached. Therefore, if the livestock numbers established for the allotment are too high, then the amount of time allowed in a pasture and/or on the allotment will shortened. As a result, this action will bring the grazing levels in line with proper grazing use in the allotment.

43. In fact, the ESD's for much of the grazable acres show TOTAL production in the 440 to 480 lbs. per acre range for the HCPC state which the allotment is not in. Even in HCPC grass makes up 200-300 lbs. per acre. So even if the grazable acres were in HCPC, which they are not, at 30% utilization there would be 60-90 lbs. per acre available for livestock, not what the BLM has authorized in its decision of 400 lbs. per acre. In fact,

the data collected by the BLM so far shows forage production will less than half this amount.

Response: Please refer to BLM's response to Protest Point # 42 above regarding the process BLM used for establishing the grazing levels and the relationship with acceptable utilization levels for the allotment.

44. The BLM only has 2 transects where it has determined actual forage production, one in the Bullington pasture and the other in the Gap pasture which found 273 and 83 lbs. per acre of forage respectively. This data shows that for these two sites, at 30% utilization there would be 82 and 25 lbs. per acre available for livestock. This is 20% and 6% respectively of the 400 lbs. per acre the final decision authorized the removal of.

Response: "There are many variables that effect determining proper grazing capacity such as climatic fluctuation, increases in wildlife grazing (particularly elk), shrub and tree invasion, changes in grazing methods, etc. Because both climate and vegetation are dynamic and always changing, any determination will only be an estimate of a moving target. Furthermore the real problems in capacity determinations involve precipitation over years and vegetation variability among land units. Any grazing capacity determination has to take into account precipitation in prior years as well as present year. For this reason, ideally vegetation sampling should be averaged over a 3-year period (Holechek et. al. 1998. Range Management, Principles and Practices, third edition.)"

BLM has recently initiated the collection of forage production data on the allotment. At this time there has only been production data collected for one year at two locations within the allotment as referenced in the above protest point. As referenced above in the protest point, the very limited production data available (2 sites; 1 year) illustrates the variability in vegetation production across the landscape for the same vegetation type on any given year. BLM will continue to collect additional forage production data across the allotment for the purpose of re-evaluating carrying capacity within the allotment.

Furthermore, as explained in our response to protest point #42, the proposed maximum allowable utilization levels of either 30% or 40% are used as a grazing management tool for reducing the potential of over utilization by livestock regardless of what the actual carrying capacity is determined to be. In other words, monitoring of utilization allows for the removal of livestock from a given pasture and/or allotment when it is determined that use levels have been reached. Therefore, if the livestock numbers established for the allotment are too high, then the amount of time allowed in a pasture and/or on the allotment will shortened due to reaching the specified use levels. As a result, this action will bring the grazing levels in line with proper grazing use in the allotment.

45. Table 6 provides a list of capable acres by pasture. One of the problems with these calculations are that cattle rarely use slopes over 30% so the calculations are on the very high side.

Response: The slope guidelines recommended for grazing-capacity adjustments by Holechek (J.L.Holechek, 1988), are shown below:

PERCENT SLOPE	PERCENT REDUCTION IN GRAZING CAPACITY
0 - 10	None
11 - 30	30
31 – 60	60
Over 60	100 (consider these slopes un-grazable)

The guidelines established by Holechek did not preclude allocating forage for slopes over 30% as the guidelines indicate in the above table. To the contrary, a percentage of forage was allocated for slopes up to 60%.

In calculating the areas of the allotment suitable for grazing, the EA did not allocate any forage for areas of the allotment that had slopes greater than 40%. Therefore, the criteria used in the analysis is a more conservative allocation of forage based on existing slopes than that contained in the above guidelines recommended by Holechek.

46. Next the process used total production not forage production, since forage production is generally less than 50% of total production, that results in a massive overestimation. Added to this is the fact that current conditions are severely degraded and are not producing what the ESD's indicate. Added to this is the fact that forage consumption is far higher today that the 29 lbs. per day used in the calculations. Please see the attached AUM 3.pdf for details. All these added together show that the BLM's estimates are wildly overoptimistic.

Response: Please refer to BLM's response to Protest Point #42 above.

In regards to daily intake requirements for livestock, according to Holechek et. al. 1998 the best way to derive daily forage demand (dry matter basis) of ruminant animals is to multiply their body weight by 2 percent. Using this methodology the daily intake requirement for a 1,000 lb. cow would be 20 lbs. per day. To account for the fact that the weight of many breeds of cattle exceeds 1,000 lbs., a daily intake requirement of 29 lbs. per day was used in the analysis which equates to a 1,450 lb. cow. As previously stated, the established utilization levels will help in determining the final capacity of the allotment.

47. Let's now move to problems with the proposed decision displayed in Table 8. Magpie, even under the overestimates discussed above has 49 AUM's yet the proposed decision places 156 pairs in the pasture for 52 – 61 days, removing 266 to 312 AUM's. So even based on your massive overestimates, this pasture is overstocked more than 450%.

The River pasture, under the BLM's overestimates, produces 140 AUM's yet is being stocked at between 266 and 312 AUM's. So even based on your massive overestimates, this pasture is overstocked more than 200%.

East Lavender has 32 AUM's but is being stocked at 156 AUM's or nearly 500% over.

Response: Table 8 contained in the EA is BLM's best estimate of the carrying capacity by pasture for the allotment. As explained in BLM's response to protest point #44 above according to Holechek et. al. 1998 "There are many variables that effect determining proper grazing capacity such as climatic fluctuation, increases in wildlife grazing (particularly elk), shrub and tree invasion, changes in grazing methods, etc. Because both climate and vegetation are dynamic and always changing, any determination will only be an estimate of a moving target. Furthermore the real problems in capacity determinations involve precipitation over years and vegetation variability among land units." Therefore, the forage availability for each pasture listed in Table 8 referenced above, are BLM's best estimates of carrying capacity and are not absolute. Furthermore, the proposed livestock grazing rotation schedules outlined in the proposed grazing decision provides the framework for implementing necessary rest and/or deferment from grazing particularly during the critical spring growing season. The proposed grazing durations identified for each pasture are being used as a starting point for implementation. As explained in earlier responses to your comments regarding the EA, as well as to protest points in this document, utilization monitoring will be conducted within the allotment as per the requirements of the proposed grazing decision. If utilization monitoring indicates that allowable utilization levels of either 30% or 40% have been exceeded in any pasture two years out of a five year period then grazing time within those pastures where use levels have been exceeded will be reduced. Therefore, this will allow BLM to make the appropriate adjustments to grazing levels within the allotment.

48. The capacity of private lands has nothing to do with permitting on BLM lands.

Response: To the contrary of your protest point, as per BLM's Authorizing Grazing Use Handbook (H-4130-1) which states: "The authorized officer may specify the percentage of public land used by livestock as determined by the proportion of livestock forage available on public lands within the allotment compared to the total amount available from both public lands and those owned or controlled by the permittee or lessee."

In the case of Gypsum Valleys Allotment, the grazing permittees owns large tracts of unfenced private lands within the allotment. These private lands do provide a portion of the forage base within the allotment. Therefore, BLM recognizes and accounts for this forage through the percent public land calculation that is specified on the term grazing permit.

49. The requirements listed under Table 22 have not been incorporated into the proposed decision.

The EA states that no Class III surveys were conducted on the allotment because this allotment "was considered low relative to the other adjacent allotments" but whether site densities are lower or not does not absolve BLM from its NHPA obligations.

The EA says that a programmatic agreement, mitigation actions and surveys will be conducted as part of the permit yet the proposed decision is totally silent on these requirements.

Response: The Final Grazing Decision will include the requirement for completing cultural surveys on 40 acres and monitoring of 10 known cultural sites within the allotment as identified in Table 22 of the environmental assessment. The 40 acres of cultural survey will be concentrated in area around Sweet Ice Spring.

50. The EA's analysis were based on the requirement that utilization would not be exceeded more than one year ("two or more years" is anything more than one year) in "this ten-year grazing permit" yet the proposed decision allows twice this level of exceedance.

Response: This protest point is not accurate regarding the adaptive management utilization triggers. The Adaptive Management Alternative (Alternative C) contained in the preliminary EA starting on page 16 sent out for public comment on June 30, 2015 included an adaptive management trigger that would initiate changes in authorized grazing use if utilization monitoring documented a pattern of two or more years (not necessarily consecutive) of excessive use exceeding the established utilization level in the same pasture over the life of the new 10-year term grazing permit.

Furthermore, the Final EA and Proposed Decision issued on January, 11 2016 also required changes in authorized grazing if two or more years of excessive use are documented above the established utilization levels.

51. Appendix G does not match with the proposed decision and it is unclear as to its relation to the proposed decision. Issues, such as BSC monitoring in Appendix G have not been implemented in the decision.

Response: The Monitoring and Assessment section of the proposed grazing decision identifies future monitoring efforts to include the establishment additional monitoring within the allotment following the BLM's Assessment, Inventory, and Monitoring (AIM) Strategy. This monitoring as identified in the decision will be collected at the existing long-term trend monitoring sites. The AIM protocol collects information regarding 1) soil cover, including vegetation, litter amounts, rocks, biological crusts and vegetation height using line-point intercept methodology for data collection; 2) gap intercept measurements to provide information on the size of gaps between plants; soil stability test; 3) plant species inventory; 4) photo points; and 5) soil identification through soil test pit(s). This information will be used to monitor biological soil crusts, invasive species, soil stability and litter amounts.